

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
15 September 2005 (15.09.2005)

PCT

(10) International Publication Number
WO 2005/084992 A1

(51) International Patent Classification⁷: **B60K 26/02**,
G08G 1/16, B62D 15/02, B60K 31/00

(21) International Application Number:
PCT/JP2005/004028

(22) International Filing Date: 2 March 2005 (02.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2004-059020 3 March 2004 (03.03.2004) JP

(71) Applicant (for all designated States except US): **NISSAN MOTOR CO., LTD.** [JP/JP]; 2, Takara-cho, Kanagawa-ku, Yokohama-shi, Kanagawa, 2210023 (JP).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **KOBAYASHI, Yosuke. NAITO, Genpei. KIMURA, Takeshi.**

(74) Agents: **MIYOSHI, Hidekazu** et al.; Toranomon Kotohira Tower, 2-8, Toranomon 1-chome, Minato-ku, Tokyo, 1050001 (JP).

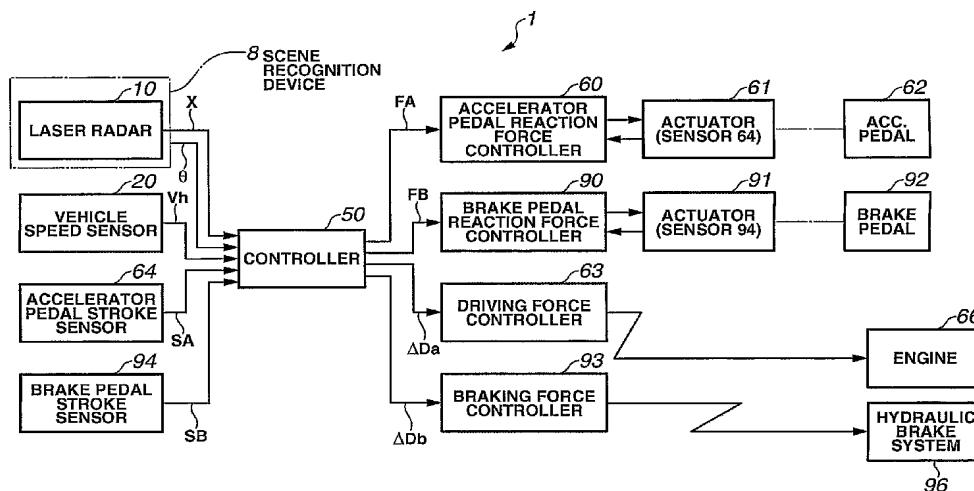
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD AND SYSTEM FOR ASSISTING A DRIVER OF A VEHICLE OPERATING A VEHICLE TRAVELING ON A ROAD



(57) Abstract: A system and method for assisting a driver operating a vehicle traveling on a road includes a scene recognition device detecting an obstacle in the path of the vehicle. Based on a distance (X) to the detected obstacle and a vehicle speed (Vh) of the vehicle, a first target discrimination is effected. Based on the distance (X) and a relative vehicle speed (Vr) of the vehicle with respect to the detected obstacle, a second target discrimination is effected. A first reaction force value (FA1, FB1) is determined versus a first risk (RP1) from the detected obstacle upon determination, by the first target discrimination, that the detected obstacle